

## WEST Search History

DATE: Tuesday, August 12, 2003

| <u>Set Name Query</u>                       | <u>Hit Count</u> | <u>Set Name</u> |
|---|------------------|-----------------|
| side by side                                |                  | result set      |
| <i>DB=PGPB; PLUR=YES; OP=ADJ</i>            |                  |                 |
| L7 tris trimethylsiloxy silane and cleaning | 5                | L7              |
| <i>DB=DWPI; PLUR=YES; OP=ADJ</i>            |                  |                 |
| L6 tris trimethylsiloxy silane and cleaning | 1                | L6              |
| <i>DB=EPAB; PLUR=YES; OP=ADJ</i>            |                  |                 |
| L5 tris trimethylsiloxy silane and cleaning | 1                | L5              |
| <i>DB=JPAB; PLUR=YES; OP=ADJ</i>            |                  |                 |
| L4 tris trimethylsiloxy silane and cleaning | 1                | L4              |
| L3 L2                                       | 0                | L3              |
| <i>DB=USPT; PLUR=YES; OP=ADJ</i>            |                  |                 |
| L2 L1 and cleaning                          | 33               | L2              |
| L1 tris trimethylsiloxy silane              | 198              | L1              |

END OF SEARCH HISTORY

\* \* \* \* STN Columbus \* \* \* \* \*

FILE 'HOME' ENTERED AT 08:18:34 ON 12 AUG 2003

=> file reg

| COST IN U.S. DOLLARS | SINCE FILE ENTRY | TOTAL SESSION |
|----------------------|------------------|---------------|
| FULL ESTIMATED COST  | 0.21             | 0.21          |

FILE 'REGISTRY' ENTERED AT 08:18:39 ON 12 AUG 2003  
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 AUG 2003 HIGHEST RN 565156-77-6  
DICTIONARY FILE UPDATES: 11 AUG 2003 HIGHEST RN 565156-77-6

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 6, 2003

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. See HELP PROPERTIES for more information. See STNote 27, Searching Properties in the CAS Registry File, for complete details:  
<http://www.cas.org/ONLINE/STN/STNOTES/stnotes27.pdf>

=> e tris9trimethylsiloxysilane/cn

|     |       |   |
|-----|-------|---|
| E1  | 1     | TRIS-THP PGF2.ALPHA./CN   |
| E2  | 1     | TRIS-X/CN   |
| E3  | 0 --> | TRIS9TRIMETHYLSILOXY)SILANE/CN  |
| E4  | 1     | TRISABBREVIATIN BBB/CN  |
| E5  | 1     | TRISACETONITRILE (CYCLOPENTADIENYL) RUTHENIUM<br>HEXAFLUOROPHOSPH<br>ATE/CN   |
| E6  | 1     | TRISACETYL CYANURATE/CN   |
| E7  | 1     | TRISACETYLAMINOMETHANE/CN   |
| E8  | 1     | TRISACETYLGALLIC ACID-TRIMETHYLSILYL<br>4-ACETOXYBENZOATE-TRIME<br>THYLSILYL .BETA. - (4-HYDROXYPHENYL) PROPIONATE COPOLYMER/CN |
| E9  | 1     | TRISACRYL/CN  |
| E10 | 1     | TRISACRYL FB 2000/CN  |
| E11 | 1     | TRISACRYL GF 05/CN  |
| E12 | 1     | TRISACRYL GF 05LS-DEAE/CN   |

=> e tris(trimethylsiloxysilane/cn

|    |       |   |
|----|-------|---|
| E1 | 1     | TRIS (TRIMETHYLSILOXY) PHENYLSILANE/CN    |
| E2 | 1     | TRIS (TRIMETHYLSILOXY) PHOSPHINE OXIDE/CN |
| E3 | 1 --> | TRIS (TRIMETHYLSILOXY) SILANE/CN          |
| E4 | 1     | TRIS (TRIMETHYLSILOXY) SILANOL/CN         |
| E5 | 1     | TRIS (TRIMETHYLSILOXY) SILYL CELLULOSE/CN |
| E6 | 1     | TRIS (TRIMETHYLSILOXY) SILYL CHLORIDE/CN  |

method)

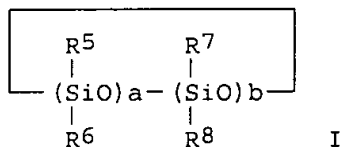
=> d all 1-7

L4 ANSWER 1 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2002:754663 CAPLUS  
DN 137:281058  
TI Vapor phase siloxane dry **cleaning** process  
IN Perry, Robert J.; Hubbard, Patricia A.  
PA General Electric Company, USA  
SO PCT Int. Appl., 21 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM D06L001-02  
ICS D06L001-04; C11D011-00; D06F043-00; C11D007-50; C11D003-16  
CC 46-5 (Surface Active Agents and Detergents)  
FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 2002077356   | A1   | 20021003 | WO 2002-US4620  | 20020215 |
|      | W:  |      |          |                 |          |
|      | AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, |      |          |                 |          |
| TM   |   |      |          |                 |          |
|      | RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  |      |          |                 |          |
|      | US 2003019048   | A1   | 20030130 | US 2001-813666  | 20010321 |
| PRAI | US 2001-813666  | A    | 20010321 |                 |          |
| OS   | MARPAT 137:281058   |      |          |                 |          |
| GI   |   |      |          |                 |          |

US 6610108 8/2/2003

20030019048



AB Volatile cyclic, linear or branched siloxanes are used in the vapor phase for the **cleaning** of soiled or stained fabrics. The linear or branched siloxanes are M<sub>2</sub>+y+2zD<sub>x</sub>TyQ<sub>z</sub> (M = R<sub>1</sub>SiO<sub>1/2</sub>; D = R<sub>2</sub>R<sub>3</sub>SiO<sub>2/2</sub>; T = R<sub>4</sub>SiO<sub>3/2</sub>; and Q = SiO<sub>4/2</sub>; R<sub>1-4</sub> = a monovalent hydrocarbon radical having 1-40 C atoms; and x and y and z are each integers, where 0 < x < 10 and 0 < y < 10 and 0 < z < 10). The cyclic siloxanes are (I) [R<sub>5-8</sub> = a monovalent hydrocarbon group having 1-40 C atoms; a and b are each integers where 0 < a < 10 and 0 < b < 10, provided that 3.1toreq. (a + b) .ltoreq.10].

ST siloxane dry **cleaning** agent textile

IT Detergents

(dry-cleaning; volatile phase cyclic, linear or branched  
siloxane solvent for dry **cleaning** of garments)

IT **Cleaning** solvents

Textiles

(volatile phase cyclic, linear or branched siloxane solvent for dry  
**cleaning** of garments)

IT Cyclosiloxanes

Polysiloxanes, uses

Siloxanes (nonpolymeric)

RL: TEM (Technical or engineered material use); USES (Uses)

(volatile phase cyclic, linear or branched siloxane solvent for dry  
**cleaning** of garments)

IT 107-46-0, Hexamethyldisiloxane 107-51-7, Octamethyltrisiloxane  
107-52-8, Tetradecamethylhexasiloxane 141-62-8, Decamethyltetrasiloxane  
141-63-9, Dodecamethylpentasiloxane 541-01-5,  
Hexadecamethylheptasiloxane 541-02-6, Decamethylcyclopentasiloxane  
**17928-28-8**, Methyltris(trimethylsiloxy)silane

RL: TEM (Technical or engineered material use); USES (Uses)

(volatile phase cyclic, linear or branched siloxane solvent for dry  
**cleaning** of garments)

RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Berndt, D; US 5942007 A 1999 CAPLUS
- (2) Imajo, Y; US 5833761 A 1998
- (3) Japan Field Kk; JP 06032795 B 1994
- (4) Japan Field Kk; JP 06238243 A 1994 CAPLUS
- (5) Japan Field Kk; JP 06238244 A 1994 CAPLUS
- (6) Kasprzak, K; US 4685930 A 1987 CAPLUS
- (7) Lee, M; US 5834416 A 1998 CAPLUS
- (8) Lion Fat & Oil Co Ltd; JP 53056203 A 1978 CAPLUS
- (9) Olympus Optical Co Ltd; JP 07328563 A 1995 CAPLUS
- (10) Perry, R; US ~~2002004953~~ A1 2002
- (11) Resch, C; US ~~5676705~~ A 1997
- (12) Storey, L; WO 9910587 A 1999 CAPLUS
- (13) Unilever Plc; EP 1092803 A 2001 CAPLUS

L4 ANSWER 2 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:714163 CAPLUS

DN 137:232767

TI Preparation of branched siloxanes useful as industrial siloxane  
lubricants, cosmetic fluids, and **cleaning** agents.

IN Asai, Satoshi; Tsukioka, Kazumasa

PA Shin-Etsu Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C07F007-08

ICS C08G077-08; C08G077-04

CC 29-6 (Organometallic and Organometalloidal Compounds)

Section cross-reference(s): 45

FAN.CNT 1

|      | PATENT NO.   | KIND | DATE            | APPLICATION NO. | DATE     |
|------|--|------|-----------------|-----------------|----------|
| PI   | EP 1241171   | A1   | 20020918        | EP 2002-251818  | 20020314 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL, TR |      |                 |                 |          |
|      | JP 2002265478  | A2   | 20020918        | JP 2001-71788   | 20010314 |
|      | US 2002133035  | A1   | 20020919        | US 2002-96589   | 20020314 |
|      | <u>US 6596892</u>  | B2   | <u>20030722</u> |                 |          |
| PRAI | JP 2001-71788  | A    | 20010314        |                 |          |

OS CASREACT 137:232767

AB Branched siloxanes, [e.g., methyltris(trimethylsiloxy)silane] are  
effectively prepd. in high yields by reacting a trichlorosilane (e.g.,  
methyltrichlorosilane) with a disiloxane (e.g., hexamethyldisiloxane) in  
the presence of a linear phosphonitric chloride (LPNC) catalyst.  
Compds. of the type prepd. are useful as industrial siloxane lubricants,  
cosmetic fluids, and **cleaning** agents.

ST siloxane nonpolymeric prepn linear phosphonitric chloride catalyst;  
lubricant siloxane nonpolymeric prepn; cosmetic fluid siloxane  
nonpolymeric prepn; **cleaning** agent siloxane nonpolymeric prepn;  
methyltristriethylsiloxysilane prepn; propyltristriethylsiloxysilane  
prepn; alkyltrisalkylsiloxysilane prepn

IT Phosphonitrile compounds

RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);  
 USES (Uses)  
 (catalysts; prepn. of linear phosphonitrilic chloride (LPNC) catalyst  
 for prepn. of nonpolymeric siloxanes)

IT Cosmetics  
 (liqs.; prepn. of branched siloxanes useful as industrial siloxane  
 lubricants, cosmetic fluids, and **cleaning** agents)

IT Scouring agents  
 (prepn. of branched siloxanes useful as industrial siloxane  
 lubricants,  
 cosmetic fluids, and **cleaning** agents)

IT Siloxanes (nonpolymeric)  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of branched siloxanes useful as industrial siloxane  
 lubricants,  
 cosmetic fluids, and **cleaning** agents)

IT Lubricants  
 (siloxane; prepn. of branched siloxanes useful as industrial siloxane  
 lubricants, cosmetic fluids, and **cleaning** agents)

IT 13940-58-4P **17928-28-8P**, Methyltris(trimethylsiloxy)silane  
 60111-46-8P  
 RL: IMF (Industrial manufacture); PREP (Preparation)  
 (prepn. of branched siloxanes)

IT 75-79-6, Methyltrichlorosilane 107-46-0, Hexamethyldisiloxane  
 141-57-1, Propyltrichlorosilane 10025-78-2, Trichlorosilane  
 13597-73-4, Disiloxane  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of branched siloxanes)

IT 1832-07-1P, Phosphonitrile chloride  
 RL: CAT (Catalyst use); IMF (Industrial manufacture); PREP (Preparation);  
 USES (Uses)  
 (prepn. of linear phosphonitrilic chloride (LPNC) catalyst for prepn.  
 of nonpolymeric siloxanes)

IT 999-97-3, Hexamethyldisilazane 10026-13-8, Phosphorus pentachloride  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of linear phosphonitrilic chloride (LPNC) catalyst for prepn.  
 of nonpolymeric siloxanes)

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Emsley, J; JOURNAL OF THE CHEMICAL SOCIETY, SECTION A 1971, P2863 CAPLUS
- (2) Gen Electric; EP 0928632 A 1999 CAPLUS
- (3) Hans-Joachim, V; US 4824982 A 1989 CAPLUS
- (4) Karl-Heinrich, W; US 3549680 A 1970
- (5) Shinetsu Chemical Co; EP 0435654 A 1991 CAPLUS
- (6) Wohlfarth, E; US 3839388 A 1974 CAPLUS

L4 ANSWER 3 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 2002:503426 CAPLUS

DN 137:64940

TI Method of dry **cleaning** fabrics and dry **cleaning**  
 solvent therefor

IN Sugo, Michihiro; Asai, Satoshi

PA Shin-Etsu Chemical Co., Ltd., Japan

SO Eur. Pat. Appl., 8 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM C11D007-50

ICS C11D011-00; D06L001-02; D06L001-08

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

|    | PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|----|--|------|----------|-----------------|----------|
| PI | EP 1219699   | A1   | 20020703 | EP 2001-403391  | 20011220 |
|    | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK; CY, AL, TR |      |          |                 |          |

*applicant's  
priority*

|      |                |    |          |                |          |
|------|----------------|----|----------|----------------|----------|
|      | JP 2002256292  | A2 | 20020911 | JP 2001-387229 | 20011220 |
|      | US 2002116769  | A1 | 20020829 | US 2001-25909  | 20011226 |
| PRAI | JP 2000-394481 | A  | 20001226 |                |          |

OS MARPAT 137:64940

AB The method comprises (a) immersing or soaking a fabric material in a dry **cleaning** solvent contg. .gtoreq.30% which is a tris(trimethylsiloxy)silane RSi(OSiMe3)3 (R = C1-6 monovalent hydrocarbyl) and 0-70% petroleum-based hydrocarbon solvent to dissolve out dirt materials deposited on the fabric material into the solvent; (b) removing the dirt material dissolved dry **cleaning** solvent by solid-liq. sepn.; and (c) drying the cleaned fabric material. The **cleaning** method provide high cleansing effect on oily or greasy dirt deposited on the fabrics and very pleasant touch feeling.

ST trimethylsiloxy silane dry **cleaning** solvent fabric

IT Hydrocarbon oils  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (Brightsol; method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT Textiles  
 (cotton; method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT Dry **cleaning** solvents  
 (drying; method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT Polyamide fibers, miscellaneous  
 Polyester fibers, miscellaneous  
 RL: MSC (Miscellaneous)  
 (fabrics; method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT Textiles  
 (method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT Petroleum hydrocarbons  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT 17928-28-8P, Methyltris(trimethylsiloxy)silane 60111-46-8P  
 RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
 (method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT 1873-89-8D, Tris(trimethylsiloxy)silane, alkyl derivs.  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (method of dry **cleaning** fabrics using  
 tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

IT 75-79-6, Methyltrichlorosilane 107-46-0, Hexamethyldisiloxane 141-57-1, Propyltrichlorosilane 1066-40-6, Trimethyl silanol  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of tris(trimethylsiloxy)silane-based dry **cleaning** solvents)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Gen Electric; EP 1043443 A 2000

L4 ANSWER 4 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN *bad date*

AN 2002:482729 CAPLUS

DN 137:34816

TI Dry-**cleaning** detergent compositions containing silicone oils and silicone-type surfactants

IN Sugai, Michihiro

PA Shin-Etsu Chemical Industry Co., Ltd., Japan

SO Jpn. Kokai Tokyo Koho, 7 pp.  
 CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D003-20  
ICS C08G077-46; C11D001-82; C11D003-43; C11D010-02; D06L001-04  
CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

|      | PATENT NO.     | KIND | DATE     | APPLICATION NO. | DATE     |
|------|----------------|------|----------|-----------------|----------|
| PI   | JP 2002180091  | A2   | 20020626 | JP 2000-381457  | 20001215 |
| PRAI | JP 2000-381457 |      | 20001215 |                 |          |

AB The detergent compn. with good detergency and less odor of residual solvent on clothing, comprises 95-99.9% silicone oil with b.p. .ltoreq.300.degree. at 1 atm. and 0.1-5% silicone surfactant compatible to the silicone oil. Thus, a dry-cleaning detergent compn. comprising 99.7 parts octamethylcyclopentasiloxane and 0.3 parts (CH<sub>3</sub>)<sub>3</sub>SiO[Si(CH<sub>3</sub>)<sub>2</sub>O]<sub>27</sub>[Si(R)(CH<sub>3</sub>)O]<sub>3</sub>Si(CH<sub>3</sub>)<sub>3</sub> (R = -(CH<sub>2</sub>)<sub>30</sub>(C<sub>2</sub>H<sub>4</sub>O)<sub>4</sub>H) showed good detergency and no odor of residual solvent.

ST silicone oil dry **cleaning** detergent; polyoxyalkylene polysiloxane surfactant dry **cleaning** detergent

IT Surfactants  
(dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT Polysiloxanes, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT Detergents  
(dry-cleaning; dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT Polysiloxanes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polyoxyalkylene-, graft, surfactants; dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT Polyoxyalkylenes, uses  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polysiloxane-, graft, surfactants; dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT 214495-17-7DP, trimethylsilyl-terminated  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT 107-51-7, Octamethyltrisiloxane 141-62-8, Decamethyltetrasiloxane 141-63-9, Dodecamethylpentasiloxane **17928-28-8**, Tris(trimethylsiloxy)methylsilane 62306-33-6, Octamethylcyclopentasiloxane  
RL: TEM (Technical or engineered material use); USES (Uses)  
(dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

IT 156310-28-ODP, Dimethylsilanediol-methylsilanediol-ethylene oxide graft copolymer, trimethylsilyl-terminated 163750-01-4P, Dimethylsilanediol-methylsilanediol-ethylene oxide-propylene oxide graft copolymer n-butyl ether  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(surfactant; dry-cleaning detergent compns. contg. silicone oils and silicone-type surfactants)

L4 ANSWER 5 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2001:453074 CAPLUS  
DN 135:63023  
TI Process for stabilization of siloxane dry **cleaning** solvents by contacting them with water  
IN Perry, Robert James; Riccio, Donna A.  
PA General Electric Co., USA

SO PCT Int. Appl., 18 pp.

CODEN: PIXXD2

DT Patent

LA English

IC ICM C07F007-20

ICS C08G077-34; D06L001-04; D06L001-02; D06L001-08

CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

|      | PATENT NO.  | KIND | DATE     | APPLICATION NO. | DATE     |
|------|---|------|----------|-----------------|----------|
| PI   | WO 2001044256   | A1   | 20010621 | WO 2000-US31556 | 20001116 |
|      | W: JP   |      |          |                 |          |
|      | RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, |      |          |                 |          |
|      | PT, SE, TR  |      |          |                 |          |
|      | US 6368259  | B1   | 20020409 | US 1999-466484  | 19991217 |
|      | EP 1242430  | A1   | 20020925 | EP 2000-978745  | 20001116 |
|      | R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,, |      |          |                 |          |
|      | IE, FI, CY, TR  |      |          |                 |          |
|      | JP 2003516997   | T2   | 20030520 | JP 2001-544746  | 20001116 |
| PRAI | US 1999-466484  | A    | 19991217 |                 |          |
|      | US 2000-547517  | A    | 20000412 |                 |          |
|      | WO 2000-US31556   | W    | 20001116 |                 |          |

AB A method for stabilizing silicone dry **cleaning** solvents that may contain an undesirable acidic impurity capable of causing cyclic siloxane formation comprises contacting the silicone solvent with an aq. soln.,

and

sepg. the silicone solvent.

ST siloxane dry **cleaning** solvent stabilization water

IT Zeolite 13X

Zeolite 4A

RL: NUU (Other use, unclassified); USES (Uses)

(adsorbents; stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns. and drying with)

IT Dry **cleaning** solvents

Extractants

Extraction

(stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns.)

IT Cyclosiloxanes

Siloxanes (nonpolymeric)

RL: PUR (Purification or recovery); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns.)

IT Adsorbents

(stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns. and drying with)

IT 7778-18-9, Calcium sulfate 10043-52-4, Calcium chloride, uses

RL: NUU (Other use, unclassified); USES (Uses)

(adsorbent; stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns. and drying with)

IT 7732-18-5, Water, uses

RL: NUU (Other use, unclassified); USES (Uses)

(stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns.)

IT 107-51-7P, Octamethyltrisiloxane 141-62-8P, Decamethyltetrasiloxane

141-63-9P, Dodecamethylpentasiloxane 541-02-6P,

Decamethylcyclopentasiloxane 556-67-2P, Octamethylcyclotetrasiloxane

17928-28-8P, Methyltris(trimethylsiloxy)silane

RL: PUR (Purification or recovery); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(stabilization of siloxane dry **cleaning** solvents by contacting with aq. solns.)

IT 144-55-8, Sodium bicarbonate, uses 497-19-8, Sodium carbonate, uses

7447-40-7, Potassium chloride, uses 7487-88-9, Magnesium sulfate, uses

7647-14-5, Sodium chloride, uses 7647-15-6, Sodium bromide, uses



RL: NUU (Other use, unclassified); USES (Uses)  
(stabilization of siloxane dry **cleaning** solvents by  
contacting with aq. solns. contg.)

IT 64-19-7, Acetic acid, processes 75-75-2, Methanesulfonic acid  
104-15-4, p-Toluenesulfonic acid, processes 1832-07-1, Phosphonitrilic  
chloride 7647-01-0, Hydrochloric acid, processes 7664-93-9, Sulfuric  
acid, processes 27176-87-0, Dodecylbenzenesulfonic acid  
RL: REM (Removal or disposal); PROC (Process)  
(stabilization of siloxane dry **cleaning** solvents by  
contacting with aq. solns. to remove)

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE  
(1) Akihito, T; US 5312947 A 1994 CAPLUS  
(2) General Electric Company; US 2834753 A 1958 CAPLUS  
(3) Kreussler Chem Fab; DE 3739711 A 1989 CAPLUS  
(4) Shin Etsu Chem Co Ltd; JP 04-004224 A 1992, V016(144) CAPLUS  
(5) Shinetsu Chemical Co; EP 0543665 A 1993 CAPLUS  
(6) Toray Silicone Co; EP 0277825 A 1988 CAPLUS  
(7) Ulf, G; US 4661612 A 1987 CAPLUS

L4 ANSWER 6 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN  
AN 2001:360005 CAPLUS  
DN 134:368621  
TI Process for stabilization of siloxane dry **cleaning** compounds  
IN Perry, Robert James; Riccio, Donna A.  
PA General Electric Company, USA  
SO PCT Int. Appl., 19 pp.  
CODEN: PIXXD2  
DT Patent  
LA English  
IC ICM C07F007-20  
ICS C08G077-34  
CC 46-5 (Surface Active Agents and Detergents)

FAN.CNT 1

| PATENT NO.   | KIND | DATE     | APPLICATION NO. | DATE     |
|--|------|----------|-----------------|----------|
| WO 2001034613  | A1   | 20010517 | WO 2000-US29537 | 20001026 |
| W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE,<br>DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,<br>KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,<br>MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,<br>TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, |      |          |                 |          |
| RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,<br>DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ,<br>CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG   |      |          |                 |          |
| EP 1230247   | A1   | 20020814 | EP 2000-973896  | 20001026 |
| R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,<br>IE, SI, LT, LV, FI, RO, MK, CY, AL   |      |          |                 |          |
| BR 2000015476  | A    | 20021008 | BR 2000-15476   | 20001026 |
| JP 2003514076  | T2   | 20030415 | JP 2001-537326  | 20001026 |
| PRAI US 1999-438069  | A    | 19991110 |                 |          |
| US 2000-547645   | A    | 20000412 |                 |          |
| WO 2000-US29537  | W    | 20001026 |                 |          |
| OS MARPAT 134:368621   |      |          |                 |          |
| AB A method for stabilizing silicone dry <b>cleaning</b> solvents contg.<br>impurities comprises contacting the silicone solvent with an adsorbent,<br>neutralizing agent or combination thereof to purify the solvent and<br>prevent reequilibration and polymn., and sepg. the silicone solvent.   |      |          |                 |          |
| ST silicone dry <b>cleaning</b> solvent stabilization absorbent<br>neutralizing agent  |      |          |                 |          |
| IT Clays, uses   |      |          |                 |          |
| RL: TEM (Technical or engineered material use); USES (Uses)<br>(acidic, adsorbent; process for stabilization of siloxane dry<br><b>cleaning</b> compds.)   |      |          |                 |          |
| IT Diatomite   |      |          |                 |          |

Fuller's earth  
 Silica gel, uses  
 Zeolite 13X  
 Zeolite 4A  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (adsorbent; process for stabilization of siloxane dry **cleaning** compds.)

IT Neutralization  
 (agent; process for stabilization of siloxane dry **cleaning** compds.)

IT Charcoal  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (decolorizing, adsorbent; process for stabilization of siloxane dry **cleaning** compds.)

IT Polysiloxanes, processes  
 RL: PEP (Physical, engineering or chemical process); PROC (Process)  
 (dry **cleaning** solvent; process for stabilization of siloxane dry **cleaning** compds.)

IT Adsorbents  
 Dry **cleaning** solvents  
 Stabilizing agents  
 (process for stabilization of siloxane dry **cleaning** compds.)

IT 1832-07-1, Phosphonitrile chloride  
 RL: REM (Removal or disposal); PROC (Process)  
 (linear; process for stabilization of siloxane dry **cleaning** compds.)

IT 64-19-7, Acetic acid, processes 75-75-2, Methanesulfonic acid  
 104-15-4, p-Toluenesulfonic acid, processes 7647-01-0, Hydrochloric acid,  
 processes 7664-93-9, Sulfuric acid, processes 27176-87-0,  
 Dodecylbenzenesulfonic acid  
 RL: REM (Removal or disposal); PROC (Process)  
 (process for stabilization of siloxane dry **cleaning** compds.)

IT 107-51-7, Octamethyltrisiloxane 141-62-8, Decamethyltetrasiloxane  
 141-63-9, Dodecamethylpentasiloxane 541-02-6,  
 Decamethylcyclopentasiloxane 556-67-2, Octamethylcyclotetrasiloxane  
**17928-28-8**, Methyltris(trimethylsiloxy)silane  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (process for stabilization of siloxane dry **cleaning** compds.)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

- (1) Gen Electric; DE 2904706 A 1979 CAPLUS
- (2) Gulick, G; US 3755152 A 1973 CAPLUS
- (3) Kreussler Chem Fab; DE 3739711 A 1989 CAPLUS
- (4) Licentia Gmbh; EP 0186736 A 1986 CAPLUS

L4 ANSWER 7 OF 7 CAPLUS COPYRIGHT 2003 ACS on STN

AN 1999:498414 CAPLUS

DN 131:146045

TI Organosiloxane type **cleaning** agent and **cleaning** method

IN Kobayashi, Hideki; Masatomi, Akira; Mikami, Ryuzo; Ohkawa, Tadashi

PA Dow Corning Toray Silicone Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C11D001-82

ICS B08B003-08; C11D010-02; C23G005-032; C08L083-04; C11D001-82;  
 C11D003-43

CC 46-6 (Surface Active Agents and Detergents)

FAN.CNT 1

|      | PATENT NO.               | KIND | DATE                | APPLICATION NO. | DATE     |
|------|--------------------------|------|---------------------|-----------------|----------|
| PI   | JP 11217584              | A2   | 19990810            | JP 1998-38059   | 19980204 |
| PRAI | <del>JP 1998-38059</del> |      | <del>19980204</del> |                 |          |

OS MARPAT 131:146045

AB The title **cleaning** agents contain a siloxane oligomer selected

from  $\text{RSi}[(\text{OSiR}_2)_x\text{R}]_3$  [R = (substituted) monovalent hydrocarbon group; x = 1-3] and  $\text{Si}[(\text{OSiR}_2)_y]_4$  (R = (substituted) monovalent hydrocarbon group; y = 1-3), where R does not include chlorinated hydrocarbon groups. The compds have low surface tension and good **cleaning** liq. cutting characteristics. Methyltris (trimethylsiloxy) silane was prepd. from methyltrimethoxysilane and hexamethyldisiloxane.

ST siloxane **cleaning** agent

IT Detergents

(organosiloxane type **cleaning** agent and **cleaning** method)

IT 681-84-5P, Tetramethoxy silane 3555-47-3P, Tetrakis (trimethylsiloxy) silane **17928-28-8P**, Methyltris (trimethylsiloxy) silane

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(organosiloxane type **cleaning** agent and **cleaning** method)

IT 107-46-0, Hexamethyldisiloxane 1185-55-3, Methyl trimethoxysilane

RL: RCT (Reactant); RACT (Reactant or reagent)

(organosiloxane type **cleaning** agent and **cleaning** method)